

SHIELDED DOME RESONATOR FOR MR SCANNING OF A CEREBRUM

Abstract

A dome resonator (11) includes a resonator circuit (70) that excites and/or receives radio frequency magnetic resonance signals that emanate from a region of interest (14). The resonator circuit (70) includes multiple longitudinal conductive elements (110) that are coupled at a first end (80) and a second end (82) and tapered from the first end (80) to the second end (82). A resonator circuit support (74) is coupled to and supports the resonator circuit (70). A shield (76) is coupled to the resonator circuit support (74) and electrically isolates the resonator circuit (70) from a surrounding environment.